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Southwestern Bell Corporation

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FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY

William A. Blase, Jr.

Director Federal Regulatory

Ex Parte

Mr. William F. Caton Acting Secretary Federal Communications Commission 1919 M Street, N.W., Room 222 Washington, D.C. 20554

Re: CC Docket No. 93-162

Dear Mr. Caton:

In accordance with Commission rules, please be advised that today, Mike Auinbaugh, Chris Jines and the undersigned met with Greg Vogt, Mark Uretsky, Amy Glatter and Carol Canteen of the Tariff Division regarding Southwestern Bell's overhead cost methodology for Special Access Expanded Interconnection. Attached is a handout provided in the meeting.

If you have any questions, please let me know.

Sincerely,

Attachment

cc: Greg Vogt

Mark Uretsky Amy Glatter Carol Canteen

1401 I Street, N.W. Suite 1100 Washington, D.C. 20005

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CC DOCKET No. 93-162

Expanded Interconnection Tariff Investigation

Southwestern Bell Telephone Company

January 26, 1994

SWBT's COSTS & OVERHEAD LOADINGS

- o Expanded interconnection overhead loading is consistent with the Commission's directive in October 19, 1992 Order (see para. 128, FN 291).
 - 1. There are fundamental differences between ARMIS costs and incremental costs.
 - 2. In total, expanded interconnection prices are reasonable in comparison to other LECs.
 - 3. The overhead contribution derived from expanded interconnection rate elements is minimal as compared to SWBT's competitive services such as DS1 and DS3.

ARMIS vs INCREMENTAL COST

| ARMIS COSTS | INCREMENTAL COSTS |
|--|---|
| ARMIS costs reflect Part 36 and Part 69 Separations Processes. | Incremental Costs (IUC) are derived from a bottoms-up approach using engineering designs and usable capacities. |
| Separations allocates all direct account costs to the Special Access category including working and spare facilities, current efficient technologies as well as older less efficient technologies, high volume and low volume facilities, etc. | Incremental costs include only costs which are directly caused by the decision/service being studied using a bottoms-up approach. |
| Thus, ARMIS investments and "direct" costs include allocations of costs which are not included in an incremental cost study. | In an incremental analysis, the cost of spare capacity, older technology, etc. are treated as common costs (joint costs, shared costs, overhead costs, contribution, etc.) and are not included in IUC costs. |
| ARMIS data is only available at a study area, service category level (i.e. total special access). It is not available for DS1 and DS3 special access services. | Incremental cost methodology allows calculation of service specific costs (i.e. DS1, DS3). |

PRICE OUT COMPARISON

o The following compares other LECs' post-RAF rates on a per DS1 interconnection to pre-RAF rates originally filed by SWBT. GSF is included in these rates. Unless otherwise stated, the rates indicated for LECs other than SWBT were obtained from the Direct Case price outs submitted to the Commission on 8/20/93.

| Company | RAF Rate |
|---------------------|-----------------------------------|
| Ameritech | \$42.94 |
| Bell Atlantic | \$35.82 |
| BellSouth | \$28.27 |
| NYNEX | \$30.16 |
| Pactel ¹ | \$36.98 (per 8/30/93 Teleco. Rpt) |
| SNET | \$56.08 |
| US West | \$50.10 (filed in erratum 9/3/93) |
| Average | |
| Post RAF Rate | \$40.06 |
| | |
| SWBT Pre-RAF | \$34.47 (SWBT provides options) |
| | \$27.65 (CAP provides options) |

Pactel is of the opinion that 250 not 100 DS1s is the appropriate amount to use in the price out comparison. At 250 DS1s, Pactel's cost is \$21.79 per DS1.

SOUTHWESTERN BELL OVERHEAD CONTRIBUTION ANALYSIS

FROM SWB PRICE OUT OF 188 INTERCONNECTED DS1s

| RECURRING CHARGES WIOPTIONS WIO OPTIONS | TOTAL RATE \$1,651 \$1,415 | TO | TAL COST # 85 5 #744 | |
|---|-----------------------------------|------------------------|-----------------------------------|--------------|
| NONRECURRING CHARGES WIOPTIONS WIO OPTIONS | TOTAL RATE \$1,796 \$1,351 | TO | TAL COS \$1,796 \$1,351 | 3 |
| T OTAL WIOPTIONS WIO OPTIONS | \$3,447 \$2,76 5 | | \$2,651 \$2,081 | |
| OVERHEAD CONTRIBUTION FROM 100 INTERCONNECT W/OPTIONS (AMOUNT/FACTOR) W/O OPTIONS (AMOUNT/FACTOR) | TED DS1: | \$796 \$6 71 | 1 | 1.30 1.32 |

OVERHEAD CONTRIBUTION AVAILABLE FROM SWB DS1 SERVICE (AVERAGE PER CT)

| TOTAL REVENUE | \$115,980,8 19 |
|-----------------|-----------------------|
| TOTAL COST | #61,501,388 |
| CONTRIBUTION | *84,479,533 |
| Demand (In CTs) | 271544 |

OVERHEAD CONTRIBUTION

PER AVERAGE DS1 CT (AMOUNT/FACTOR) \$237 / 2.25

SWBT's References In the Record Regarding Overhead Loadings

OVERHEAD LOADINGS

In accordance with the October 19, 1992 Special Access Expanded Interconnection Order at paragraph 128, footnote 291, SWBT included an overhead loading in the interconnection rate development process consistent with the overhead amounts included in SWBT's present DS1 and/or DS3 rate levels.

- a. SWBT used 1991 base period demand (complete 1992 data was not available at that time) and underlying IUC to develop its overhead loadings. The resultant overhead loading factors were detailed in Figure 4.4-1 of SWBT's Transmittal No. 2260, dated February 16, 1993 and is attached as Exhibit 1.
- b. In accordance with the Commission's Designation Order dated July 23, 1993, at paragraph 22(c)(2) SWBT provided a thorough description of its overhead loading process or "closure factor" in its Direct Case filed August 20, 1993. A copy is attached as Exhibit 2.
- c. A description of the development of SWBT's overhead loading factor/closure factor for its DS1 term options and DS3 term and volume options was included in Appendix 4 of SWBT's Direct Case filed August 20, 1993 and is attached as Exhibit 3.

INTERCONNECTION CROSS CONNECT

d. In SWBT's Transmittal No. 2260 filed February 16, 1993, SWBT detailed the development of the DS1 and DS3 Interconnection Cross Connect nonrecurring charge in Figures 4.5.11-1 and 2 and the development of the recurring charge in Figures 4.5.11-3 and 4. A copy is attached as Exhibit 4.

4.4 Overhead Loadings

In accordance with the Expanded Interconnection Order at paragraph 128, footnote 291, SWBT has included in the rate development process an overhead loading. This loading is representative of the overhead amounts included in present DS1 and/or DS3 rate levels.

The overhead loading factors were developed based upon 1991 base period demand for DS1 and DS3 services.

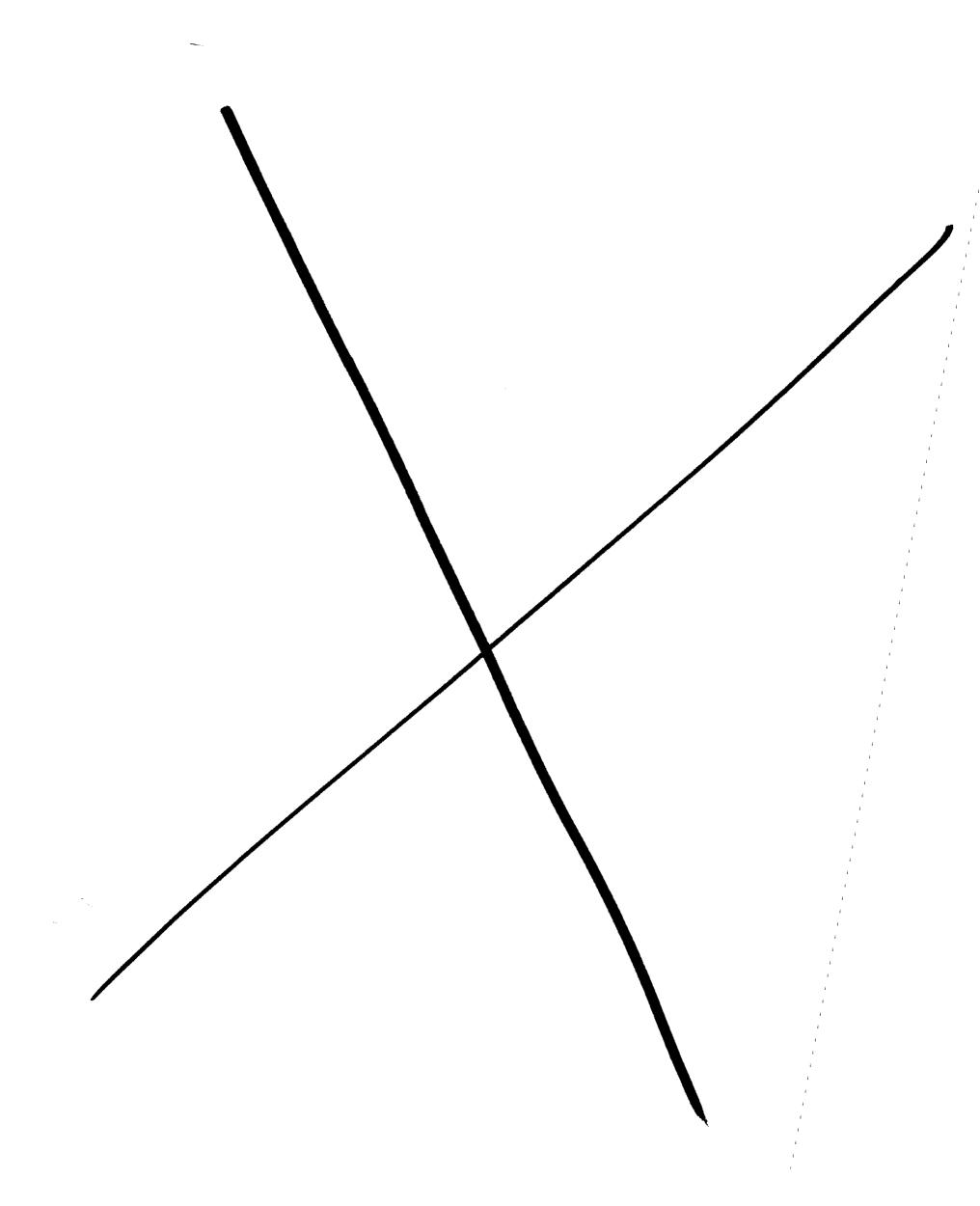
Overhead loading factor development was limited to these services as collocation/expanded interconnection is initially available at the DS1 and DS3 level only. SWBT utilized 1991 base period demand (1991 is the present base period underlying present rates and price cap indices). Complete 1992 base period demand quantities are not available at this time.

SWBT multiplied 1991 base period demand by the existing rate and the underlying IUC to provide the service. All recurring and nonrecurring quantities were included in the development of the overhead factors. Three overhead loading factors were developed: DS1, DS3 and DS1/DS3. These factors are applied to DS1, DS3 or DS1/DS3 specific charges, as appropriate.

As with the previously mentioned demand and cost data, the specific overhead loading factor and rationale is included in the following rate element specific sub-sections.

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| CLOSURE | 2.256262 | 2.457999 |
|-------------------|-------------------------------|---------------|
| TOTAL | \$51,404,005 \$9,644,669 | \$61,048,674 |
| TOTAL REVENJES | \$115,980,919 \$34,076,673 | \$150,057,593 |
| | DS1 DS3 | TOTAL DS1/DS3 |



from the actual factor utilized because of the difference in methodology (i.e., SWBT utilizes Bellcore's CAPCOST program to develop a levelized Cost of Money Factor which equals the net present value of the expected cost of money divided by the net plant in service for the account for which the factor is being developed). However, the Cost of Money derived in the TRP is generally lower than the Cost of Money percentage estimated by SWBT.

c. Overhead Cost Information.5

In response to the sub-issues under the above two headings, the <u>Designation Order</u> requires the LECs to explain how the costs were derived. LECs are required to provide overhead amounts or factors, justify rounding, etc. Further, LECs are to explain the basis for any differences in overheads among the various DS1 and DS3 services and between DS1 and DS3 services on one hand and expanded interconnection services on the other hand. LECs using closure factors are to explain how the use of closure factors result in reasonable estimates of overhead costs for expanded interconnection.

A thorough description of SWBT's overhead loading process or 'closure factor' development requires an understanding of overheads in general and SWBT's rate development process since the inception of special access. The result of the function of rate/revenues minus costs has been given a number of 'labels' in this proceeding, such as: overhead, profit, markup, or margin.

⁵ <u>Designation Order</u> at p. 10.

^{6 &}lt;u>Designation Order</u> at p. 11.

These terms, however, all have one thing in common -- they are the result of rate minus incremental cost or revenues minus the sum of Incremental Unit Cost (IUC) (as opposed to embedded cost as reflected in ARMIS).

For example, assume 10 units of demand with a rate of \$1,000 and a cost of \$500. The total revenues are \$10,000 and total costs are \$5,000. The resulting overhead/closure factor is 2.0. If all future new rates are set to provide the same level of overhead, a factor of 2.0 would be applied to the IUC associated with the new element. Likewise, the amount of overhead included in the exampled rate is \$500 which divided by cost equals 1. If a future new element rate is set to provide the same level of overhead the formula would be IUC times 1 plus IUC which is the same as IUC times a closure factor of 2.0.

Consequently, regardless of the term applied to the process, the only difference between "closure factor" and "overhead factor" is simply the nomenclature used to describe the process. In its reply comments SWBT stated the development of the overhead loading was developed by comparing total revenues to total costs. SWBT indicated this was the same process utilized to identify the closure factor contained in the 1990 annual filing. SWBT noted that the level of the overhead loading factor was reasonable when compared to the same result (closure factor) from the 1990 annual filing. SWBT compared the 2.26 DS1 overhead loading factor to the 1.96 closure factor contained in the 1990 annual filing to show the

⁷ <u>See</u>, <u>Reply Comments</u> of SWBT, filed April 5, 1993, at p. 9.

reasonableness of the overhead loading reflected in them current
DS1 rate levels.

Thus, SWBT's overhead/closure factor represents the overhead amount associated with special access service rates. Overhead is that portion of the revenue generated from sales of a service which is available to assist in recovery of the joint and common costs of the firm. As competitive pressures increase in the marketplace, overhead levels for particular services will depend primarily upon market conditions. To the extent that special access prices, and corresponding overhead margins, have been influenced by customer demand and competitive market conditions, these same factors will be reflected in interconnection charges via use of overhead/closure factors. Overhead/closure factors more closely represent actual market conditions than do arbitrary cost allocation schemes. Furthermore, since market conditions differ across individual services, (such as DS1 and DS3), price and overhead levels will reflect these variations. Identical DS1 and DS3 overhead/closure factors should therefore not be expected to result from the divergent customer demand and market supply characteristics exhibited by these separate service offerings. In addition, overhead levels between services will not likely be the same after price changes are made in compliance with Price Cap rules.

The only method to identify the amount of overhead, markup, or margin is to subtract cost from rate which is virtually the same as subtracting total costs from total revenues. Since the costs represent the total direct cost of providing the unit of service (common and joint costs are excluded) the difference

between the revenues and costs represents assistance to joint and common costs, or overhead.

Separations data, as obtained from Part 69 of the Commission's Rules and contained in ARMIS reports is not an appropriate tool for rate setting purposes.

The Part 69 rate element is special access, and this Part 69-driven-tool (ARMIS) is not useful for analyzing individual rate items. ARMIS cannot identify the direct cost of any specific special access rate item (e.g., DS1 channel termination, DS3 per mile mileage component, etc.)

Because embedded ARMIS data cannot identify the underlying cost of a special access sub-element, it likewise cannot identify the amount of reasonable overhead included in any sub-element rate level. The proper measure of overhead is the difference between the IUC to provide the sub-element (e.g., DS1 channel termination) and the rate level.

To further illustrate the reasonableness of its overhead/closure factor approach, SWBT has calculated the overhead factor which results from a comparison of the "Price-out" of 100 DS1s as prescribed and the IUC of these elements. The resulting overhead/closure factor is only 1.18 (excluding floor space rental).

The history of SWBT's special access rates begins in October 1985 after SWBT withdrew from the NECA pool. These rates were based upon the underlying incremental unit investment requirement to provide the service.

The Part 69-driven special access revenue requirement was allocated based upon the proportional relationship of the

underlying investment required to provide the service. In subsequent annual filings through 1990, SWBT utilized the current rate to allocate the revenue requirement so as to maintain existing rate relationships. In 1990 SWBT modified the relationship among the special access services based upon the filed underlying IUC to provide the service. As such, the rate levels deemed by the Commission to be the proper starting point for price caps included overhead amounts premised on the IUC results filed by SWBT in the 1990 annual filing.

Any allegations of double recovery as noted in the Designation Order are unjustified in reference to SWBT's rates. SWBT's IUC methodology used for DS1, DS3 and collocation elements reflects only direct costs associated with providing the service. Any administrative costs are direct administrative costs incurred to provide the service and not overhead administrative costs. Any portion of the direct costs associated with SWBT's collocation elements that are disallowed must also then be removed from the DS1 and DS3 underlying costs so that the overhead loading factor can be recomputed.

Since SWBT used a common method to develop collocation and DS1/DS3 costs, any Commission change to collocation costs will also cause a change in the DS1/DS3 costs used to develop the overhead/closure loading factor. Removal of a cost from DS1/DS3 generally will not cause a change in rates. Thus, a reduction in DS1 or DS3 costs will only serve to increase the overhead loading factor.

⁸ Designation Order at p. 11.

Additional data required by the order is included in Appendix 4. Appendix 4 displays the overhead loading factor/closure factor for DS1 term options and DS3 term and volume options. SWBT does not offer any DS1 volume options.

d. <u>Sample Price-outs.</u>

LECs are required to provide a "price-out" for the provision of 100 DS1s as specified in Appendix D of the <u>Designation</u>

Order. Appendix 5, attached hereto, is SWBT's price-out chart.

A diskette is included.

The <u>Designation Order</u> asks the LECs to price out their interconnection offerings in order to gauge the overall service cost of a sample 100 DS1 configuration. Further, the Commission specified that any nonrecurring costs must be amortized over a five-year period at an 11.25 percent interest rate.

The basis for comparison of the various companies' rates using the Sample Price-out designated by the Commission, however, can not give meaningful results. The use of a five-year amortization period as a means to compare various LEC rates for interconnection is not appropriate. If the Commission intends to use this analysis for the purposes of comparing individual LEC interconnection rates with individual LEC services, then the stipulation of a five-year amortization period makes this analysis flawed.

Comparisons are only meaningful when the items being compared have a common denominator (in this case, the same time period for recovery and interest rate). The Sample Price-out

⁹ Designation Order at p. 11.

procedure, and its requirement to illustrate price with nonrecurring rates recovered in five years, will erroneously show higher effective monthly rates for companies, like SWBT, that have chosen to recover the costs of collocation using nonrecurring charges to recover capital investments required to provide collocation to interconnectors. Nonrecurring charges amortized over five years are wrongly being compared to recurring rates recovering similar investments but based on different recovery periods and interest rates.

Further, this Sample Price-out is not useful for comparing existing DS1 and DS3 rates to special access expanded interconnection. As described above, expanded interconnection rates amortized over a five year period cannot be compared to LEC services whose depreciation period is prescribed by the Commission to be approximately twice as long. In addition, existing DS1 and DS3 rates correctly reflect the economies of scale being achieved by LECs in the provision of these services. This includes the ability to utilize items of plant and equipment to their capacities. This Sample Price-out assumes only 100 DS1s are being purchased. This assumption alone assures that a comparison to LEC DS1 and DS3 prices will be meaningless.

A Price-out using an amortization period reflecting the Commission's prescribed depreciation periods would yield a more meaningful comparison.

APPENDIX 4

This Appendix details the development of SWBT's overhead loading factors.

Overhead is that portion of a rate or charge that exceeds the direct cost or Incremental Unit Cost (IUC) of providing the service. The overhead amount reflected in a rate or charge recovers the joint and common costs of the firm.

To identify the overhead amount or factor of a given service, the rates and costs for all subelements of the service must be analyzed. To that end SWBT developed the total revenues and total direct costs for DS1 and DS3 service.

Total revenues were developed by multiplying the February 1993 rate by 1991 base period demand by individual rate element. These data sets were used as they were the latest available data at the time of the filing.

Next, SWBT developed the direct costs or IUC for each DS1 and DS3 element. The IUC reflects the direct capital costs associated with Depreciation, Cost of Money and Federal Income Taxes. In addition direct costs reflecting maintenance, administration and other taxes are included.

These cost components are based upon the amount of direct investment estimated to provide the service. The investment is based upon network designs developed by SWBT's design engineers. This method is required as Part 69 cannot provide any meaningful data below the special access level of detail. In addition, overhead amounts reflected in Part 69 data (i.e., ARMIS) do not reflect the underlying direct investment required to provide a unit of service.

As with the development of the revenue component, 1991 base period demand was multiplied by the IUC for each DS1 and DS3 element to determine the total direct cost to provide DS1 and DS3 service.

The final step in the process is to divide total revenues by total direct costs. The resulting overhead loading factor reflects the amount of overhead contained in the revenues derived from the services.

The resulting overhead loading factor from this process was multiplied by the direct cost or IUC associated with interconnection rate elements. As stated in SWBT's initial filing, the DS1 overhead loading factor was applied to DS1 elements, the DS3 overhead loading factor was applied to DS3 elements and the combined DS1/DS3 overhead loading factor was applied to interconnection elements that could not be attributed solely to DS1 or DS3 (e.g., the POT Frame). In addition, these overhead loading factors are appropriate as interconnection elements should

reflect the same amount of overhead reflected in the substitutable DS1/DS3 services.

Also, any removal of direct cost from interconnection elements (such as the adjustment to conduit, DC power and cross connection charges) should be matched with a corresponding adjustment to the DS1 or DS3 IUC. For example, if some portion of direct administrative expense is removed from DC power the same administrative expense should be removed from all DS1 and DS3 If the direct administrative cost is inappropriate in interconnection elements it is also inappropriate to include the expense in the DS1/DS3 IUC's. This process will result in an increase in the overhead loading factor as the total cost amount in the revenues divided by costs will be reduced. Finally, the administrative expense included in the direct costs is a direct cost administrative cost and not general or common administrative costs.

Finally, it is appropriate to include all term and volume options in the determination of the overhead loading factor as some interconnection elements represent volume provisioning. For example, as indicated in the tariff the DS1 and DS3 interconnection arrangement provides volumes of 84 and 24, respectively.

The rates originally proposed by SWBT reflected the same amount of overhead contained in SWBT's DS1 and DS3 services. Changes reflected in the TRP generally result from adjustments made to reflect the removal of GSF and corrections to the underlying DS1 and DS3 costs used in the initial filing. In addition, the DC Transmission element reflected the same overhead on investment based costs incurred by SWBT. SWBT applied the overhead loading factor to investment based costs and then added estimated charges for AC power so as to avoid applying overhead to a 'pass on' charge.

See, Application for Expedited Review of SWBT, filed July 9, 1993, at p. 12.

OVERHEAD LOADING FACTORS

| | TOTAL COSTS | TOTAL REVS | OVERHEAD FACTOR |
|----------------|----------------|---------------|--------------------|
| DS1 | | | |
| MTM | \$51,272,385 | \$115,649,680 | 2.2556 |
| TERM OPTIONS | \$229,001 | \$331,239 | 1.4465 |
| TOTAL | \$51,501,386 | \$115,980,919 | 2.2520 |
| DS3 | | | |
| MTM | \$1,178,756 | \$3,315,525 | 2.8127 |
| TERM OPTIONS | \$8,172,853 | \$30,761,149 | 3.7638 |
| VOLUME OPTIONS | \$15,210,236 | \$60,461,965 | 3.9751 |
| TOTAL | \$9,351,609 | \$34,076,673 | 3.6439 |
| DS1/DS TOTAL | \$60,852,995 | \$150,057,593 | 2.4659 |

portion of the equipment can be dedicated to a specified location in the central office. In addition, the reuse of DC power equipment is likely due to the installation increments.

4.5.11 Interconnection Cross Connect

The Interconnection Cross Connect element, the only telecommunications service rate element in the instant filing, is structured on a nonrecurring and monthly recurring charge basis. In addition, separate charges for DS1 and DS3 Interconnection Cross Connect have been developed.

The nonrecurring charge represents the one-time expensed, costs to provision the service. The monthly recurring cost is based upon the capital costs and expenses associated with the equipment utilized to provide the service.

The development of the DS1 and DS3 Interconnection Cross Connect nonrecurring charge is detailed on Figures 4.5.11-1 and 2, respectively. The state specific nonrecurring demand was multiplied by the state-specific cost to determine the state specific total nonrecurring cost. The total company nonrecurring costs were divided by total company nonrecurring demand to determine the company-wide nonrecurring unit cost.

The development of the proposed monthly recurring charge for DS1 and DS3 Interconnection Cross Connect is detailed on Figures 4.5.11-3 and 4, respectively. The company-wide monthly recurring cost was developed in the same manner as the company-wide nonrecurring cost. In addition, the DS1 and DS3 overhead loading factors were applied to their corresponding company-wide cost to determine the proposed monthly recurring rate level.

The number of working DS1 and DS3 channel terminations were utilized as the demand weighting component based on the assumption interconnector DS1 and DS3 Interconnection Cross Connect demand will reflect the same characteristic as SWBT's DS1 and DS3 channel terminations.

Separate DS1 and DS3 specific overhead loading factors were utilized since the DS1/DS3 Interconnection Cross Connect will be either at the DS1 or DS3 level. This is appropriate since the proposed rate reflects the cost-causative characteristics of the rate element.

4.5.12 Engineering Design Charge

The proposed Engineering Design Charge rate structure reflects the application of a nonrecurring charge associated with the initial collocation request. The development of the proposed charge is detailed on Figure 4.5.12-1.

DS1 INTERCONNECTION NONRECURRING CHARGE DEVELOPMENT

| STATE | NRC COST | DS1 QUANTITY | TOTAL COST | WEIGHTED COST | PROPOSED RATE |
|----------|-------------|-----------------|---------------|------------------|---------------|
| ARKANSAS | \$126.76 | 891 | \$112,944 | | |
| KANSAS | \$123.35 | 1636 | \$201,801 | | |
| MISSOURI | \$124.54 | 5167 | \$643,498 | | |
| OKLAHOMA | \$125.94 | 1417 | \$178,457 | | |
| TEXAS | \$124.53 | 13457 | \$1,675,800 | | |
| SWB | | 22568 | \$2,812,500 | \$124.623 | \$125.00 |

DS3 INTERCONNECTION NONRECURRING CHARGE DEVELOPMENT

| STATE | NRC COST | DS3 QUANTITY | TOTAL COST | WEIGHTED COST | PROPOSED RATE |
|----------|-------------|-----------------|---------------|------------------|------------------|
| ARKANSAS | \$126.76 | 47 | \$5,958 | | |
| KANSAS | \$123.35 | 88 | \$10,855 | | |
| MISSOURI | \$124.54 | 642 | \$79,955 | | |
| OKLAHOMA | \$125.94 | 113 | \$14,231 | | |
| TEXAS | \$124.53 | 1984 | \$247,068 | | |
| SWB | | 2874 | \$358,066 | \$124.588 | \$125.00 |

DS1 INTERCONNECTION RECURRING RATE DEVELOPMENT

| STATE | MONTHLY COST | DS1 QUANTITY | TOTAL MO. COST | MONTHLY UNIT COST | LOADING FACTOR | PROPOSED RATE |
|----------|-----------------|-----------------|-------------------|-------------------|-------------------|------------------|
| ARKANSAS | \$3.31 | 891 | \$2,949.210 | | | |
| KANSAS | \$3.53 | 1636 | \$5,775.080 | | | |
| MISSOURI | \$2.96 | 5167 | \$15,294.320 | | | |
| OKLAHOMA | \$3.50 | 1417 | \$4,959.500 | | | |
| TEXAS | \$3.21 | 13457 | \$43,196.970 | | | |
| SWB | | 22568 | \$72,175.080 | \$3.198 | 2.256262 | \$7.22 |